

Staphylococcus aureus* colonization in Qazvin university hospitals healthcare workers*S. Nazemsadati¹, A. Allami¹, F. Haj Manoochehri²**¹ Department of Infectious Disease, Qazvin University of Medical Sciences, Qazvin, Iran² Department of Pathology, Faculty of Medicine, Qazvin University of Medical Sciences, Qazvin, Iran

Corresponding Address: Abbas Allami, Department of Infectious Diseases, Bu-Ali Sina Hospital, Qazvin, Iran

Tel: +98-28-33333031; Email: allami9@yahoo.com

Received: 27 Aug 2017; Accepted: 13 Jan 2018

Abstract*Background:** *Staphylococcus aureus* (SA) colonization of hospital personnel is a source of hospital acquired infections.**Objective:** The aim of this study was to determine the prevalence of nasal carriage rate of SA and methicillin resistant *Staphylococcus aureus* (MRSA) among Health Care Workers (HCWs) at Qazvin university hospitals.**Methods:** A cross sectional study was conducted among 396 employees of five teaching hospitals from October 2016 to April 2017. After obtaining informed consent and completion of the questionnaire, a sample was taken from the anterior nasal cavity for microbiology. The isolation of SA and their antimicrobial sensitivity were carried out by standard bacteriological procedures (disk diffusion and E-Test method). MRSA were confirmed by cefoxitin disk diffusion test. Chi square and independent t test were used to analyze the collected data.**Findings:** From the 198 HCWs, 32 people (16.1%) carried SA that the most carriers were workers of intensive care units (20.3%). 3% of all HCWs were identified as MRSA carriers. Colonization with SA is significantly lower among nursing and higher education. All SA isolates were sensitive to vancomycin and rifampin.**Conclusion:** The rate of nasal SA (especially MRSA) carriage among HCWs of Qazvin university hospitals is low. Also, staff teaching appears to be a promising approach for reducing nasal carrier. Rifampin and mupirocin, for eradication of *Staphylococcus* colonization in health workers (even MRSA) are acceptable.**Keywords:** Methicillin resistant *staphylococcus aureus*, Healthcare workers, Nasal carriage, Antimicrobial sensitivity**Citation:** Nazemsadati S, Allami A, Haj Manoochehri F. *Staphylococcus aureus* colonization in Qazvin university hospitals healthcare workers. J Qazvin Univ Med Sci 2018; 22(2): 8-19.